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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,057	09/28/2001	Giovanna Barbarella	3797IN-1-CIP	7383

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EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 04/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

AS-8

Office Action Summary

Application No.

09/967,057

Applicant(s)

BARBARELLA ET AL.

Examiner

Marie R. Yamnitzky

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/540,659.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> | 6) <input type="checkbox"/> Other: _____ |

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1. The preliminary amendment filed 09/28/01, which amends the specification, cancels claims 1-8 and adds claims 9-14, has been entered.

Claims 9-14 are pending.

2. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

This application is claiming the benefit of a prior filed nonprovisional application under 35 U.S.C. 120, 121, or 365(c). Copendency between the current application and the prior application is required.

The prior application (09/540,659) became abandoned when the three (3) month shortened statutory period for reply, set in the Office action mailed May 30, 2001, expired. No reply to the Office action was received, and no extension of time was requested. Accordingly, the present application, filed September 28, 2001, was filed after the prior application was abandoned.

3. Acknowledgment is made of applicants' claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Italy on April 01, 1999. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

Applicant has not met the requirements for obtaining the benefit under 35 U.S.C. 120 of prior U.S. application 09/540,659, filed March 31, 2000. Therefore, the effective U.S. filing date

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of the present application is September 28, 2001, which is more than twelve months after the filing date of applicants' prior Italian application.

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The filing dates set forth in the declaration with respect to the prior foreign and U.S. applications are incorrect.

5. The disclosure is objected to because of the following informalities:

The first line of page 8 contains "7" and "660" but does not show a formula associated with these values.

The formula shown at line 20 of page 8 is unreadable.

Appropriate correction is required.

6. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of a "power supply element" as required by claims 9-13 is not clear.

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The scope of the “thienyl-S,S-dioxide compound that has a ring” as required by claims 9, 11 and 12 is not clear. The term “thienyl” implies a monovalent group, which is confusing in light of dependent claims which allow for or require more than one substituent on the thiophene-S,S-dioxide ring structure. The language “that has a ring” is also confusing because thiophene-S,S-dioxide is a ring structure. It is not clear if the phrase “that has a ring” requires that there be at least one ring in the compound in addition to the thiophene-S,S-dioxide ring structure.

The structural limitations imposed upon the device of claims 9-13 by part (ii) of claim 9 are not clear for several reasons. There may be more than one film in the device, of which only one film need be the film that includes a light emitting thienyl-S,S-dioxide compound. Accordingly, it is not clear if the at least one power supply element must be directly incorporated in the film that includes the light emitting thienyl-S,S-dioxide compound. It is also not clear if the language “directly incorporates” requires the at least one power supply element to be at least partially embedded in the at least one film. It is also not clear what, if any, structure(s) is/are being excluded by the language “without the necessity of contacting or welding”, given the open language of the claims. While contacting or welding may not be a necessity, it is not clear if contacting or welding may be included/utilized. The scope of “contacting” and “welding” are also not clear. In particular, with respect to the term “contacting”, it is reasonable to expect that a power supply element that is incorporated in a film is in contact with the film.

Proper antecedent basis is lacking for “the ring” as recited in claims 10 and 11. It is not clear if this necessarily refers to the thiophene-S,S-dioxide ring, or if it could refer to some other ring in the compound.

The limitations imposed by the preamble recitation of "electric contact" in claim 14 are not clear. It is not clear if the light emitting thienyl-S,S-dioxide compound by itself is sufficient to meet the limitations of an electric contact or if the preamble places structural and/or compositional limitations on the claimed subject matter beyond the explicitly recited requirement of a light emitting thienyl-S,S-dioxide compound.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Pouzet et al. in *J. Heterocyclic Chem.*, Vol. 34, pp. 1567-1574 (1997) or Arbizzani et al. in *Optical Materials*, Vol. 9, pp. 43-45 (January 1998) or Barbarella et al. in *J. Org. Chem.*, Vol. 63, pp. 5497-5506 (published on Web 07/17/1998).

In view of applicants' failure to comply with the conditions necessary to obtain priority benefits of prior U.S. and foreign applications, each of these references is available as prior art under 35 U.S.C. 102(b). In the event that applicants later obtain priority benefits of the prior

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U.S. and foreign applications, the Pouzet and Arbizzani references would remain available, based on publication date, under 35 U.S.C. 102(b), and the Barbarella reference would be available under 35 U.S.C. 102(a).

Subject to clarification of the limitations imposed by the preamble recitation of “electric contact”, each of the prior art references is considered to anticipate the subject matter of claim 14 since each discloses a thiophene-S,S-dioxide compound.

9. Claims 9, 11, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. (US 2002/0034658 A1).

In view of applicants’ failure to comply with the conditions necessary to obtain priority benefits of prior U.S. and foreign applications, this published application is available as prior art under 35 U.S.C. 102(e).

Yamada et al. disclose thiophene-S,S-dioxide compounds for use as light-emitting and/or electron-transporting compounds in an organic EL device. For example, see [0062]-[0075]. Yamada’s compounds meet the limitations of the thiophene-S,S-dioxide compound required by present claims 9, 11, 12 and 14.

Subject to clarification of the present claim limitations as questioned in the rejection under 35 U.S.C. 112, second paragraph as set forth in this Office action, each of the anode and cathode of Yamada’s devices is considered to meet the limitations of part (ii) as set forth in claim 9. Each of the anode and cathode is in the form of a film and each is considered to meet the limitations of a power supply element.

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Subject to clarification of the limitations imposed by the preamble recitation of "electric contact", Yamada et al. anticipate the subject matter of claim 14 since thiophene-S,S-dioxide compounds are disclosed.

10. The references made of record and not relied upon are considered pertinent to applicants' disclosure.

EP 1 041 132 A2 is applicants' own work published less than one year prior to the filing date of the present application and therefore not available as prior art.

JP 2001-313174 is of interest as disclosing thiophene-S,S-dioxide compounds for use in an organic LED. This reference is not available as prior art.

11. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (703) 308-4413. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax numbers for Art Unit 1774 are (703) 872-9311 for official after final faxes and (703) 872-9310 or (703) 305-5408 for all other official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (703) 872-9041.)

MRY
03/28/03



MARIE YAMNITZKY
PRIMARY EXAMINER

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